

**REMARKS**

The foregoing amendment amends claims 1, 4, 6, 10 and 11, cancels claims 16 and 17 and adds new claims 21 and 22. Pending in the application are claims 1-15 and 18-22, of which claims 1, 10 and 12 are independent. Claims 11, 12-15 and 18-20 are withdrawn from consideration. The following comments address all stated grounds for rejection and place the presently pending claims, as identified above, in condition for allowance.

Claims 1, 4, 6 and 10 are amended to clarify that the fluid interface ports each comprise an opening formed in a side wall of the corresponding channel, the opening sized and dimensioned such that a fluid within the channel forms a virtual wall in the opening to define the first virtual wall fluid interface port. Support for the amendment can be found throughout the application as originally filed, at least, for example, on page 9, lines 4-6 and page 17, lines 15-32 and as shown in the Figures.

Claim 11 is amended to depend from claim 10.

New claims 21 and 22 are added to capture the subject matter of claims 16 and 17 in dependent form to depend ultimately from elected claim 1. *No new matter is added.*

Amendment and/or cancellation of the claims is not to be construed as an acquiescence to any of the objections/rejections set forth in the instant Office Action, and was done solely to expedite prosecution of the application. Applicant reserves the right to pursue the claims as originally filed, or similar claims, in this or one or more subsequent patent applications.

**35 U.S.C. §112 Rejections**

In the Office Action, the Examiner rejects claims 1-10 under 35 U.S.C. §112 as being indefinite. Applicants presume that claim 11 is intended to be included in the elected and examined claims, because claim 11 depends from elected claim 10.

According to the Examiner, the claims are indefinite, because it is “unclear as to what specific component constitutes the ‘virtual wall’ of the fluid interface port.” Applicants respectfully disagree and submit that the term “virtual wall fluid interface port” is adequately defined in the specification to constitute a fluid interface port having or capable of forming a virtual wall in an opening formed in a side wall of a channel. As set forth in the specification, a

“virtual wall” refers to a meniscus of fluid disposed in an opening of the side wall of a channel, the opening having a particular size, shape and dimension. The opening of a virtual wall fluid interface port is sized and dimensioned such that fluid filling the channel, when present, forms a virtual wall, i.e., a meniscus that essentially replaces the sidewall of the microchannel so as to not substantially affect or influence fluid flow through the channel. The flow of fluid through a channel having a virtual wall is substantially identical to the flow of fluid through an identical channel in which no virtual wall is formed. The virtual wall forms a *direct* interface between the microchannel interior and the microchannel exterior, allowing direct access to the liquid in microchannel without introducing dead or unswept volume in the microchannel.

In view of the amendment, Applicants submit that the claims are definite and complete. In particular, the claims clarify a virtual wall, as defined in the specification, to constitute a meniscus of fluid in a microchannel that fills an opening in the side wall of the channel to essentially replace the absent portion of the side wall. In view of the clarification, Applicants submit that all outstanding matters are resolved and request that the application be reconsidered and allowed.

**CONCLUSION**

If a telephone conversation with Applicants' attorney would help expedite the prosecution of the above-identified application, the Examiner is urged to call the undersigned attorney at (617) 227-7400.

Please charge the fee for the requested extension of time to our Deposit Account No. 12-0080, under Order No. TGZ-001ACP2, from which the undersigned is authorized to draw. If an additional fee is due, please charge our Deposit Account No. 12-0080, under Order No. TGZ-TGZ-001ACP2.

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Respectfully submitted,

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